

Ontario Smart Grid Forum: Support Presentation

Tuesday, April 5th 2011

REVISED
April 4, 2011, Slide 21



Agenda Item # 1

S.G.F. Minutes

- **January 17th 2011 and February 8th 2011 minutes** (deferred from March 8th meeting):
 - no further comments received.
 - Recommended as **FINAL**
- **DRAFT March 8th 2011 minutes** circulated for review.
 - Recommended comment deadline: Tues., April. 19th

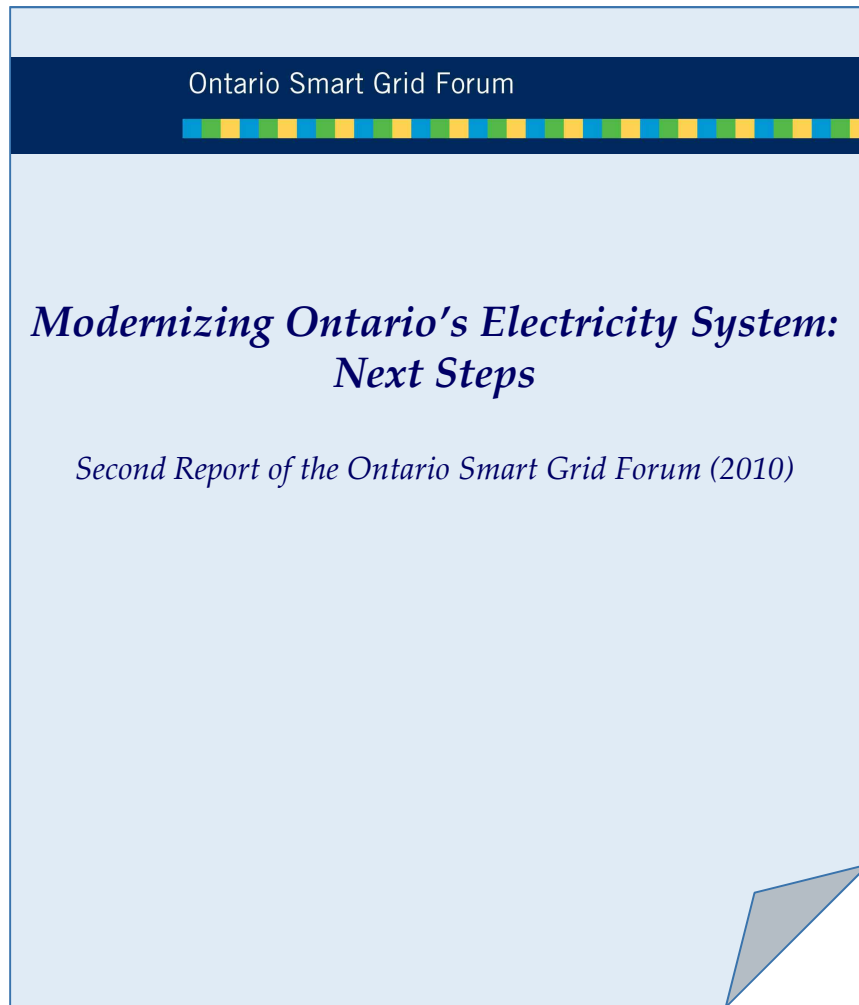
Agenda Item # 2

David Lindsay

Deputy Minister, Ontario Ministry of Energy



MINISTRY OF ENERGY



1. Summary of activities to-date
2. Structured review of draft 4 recommendations
3. Review draft, high-level roll-out plan (deferred from last meeting)

January	February	March	April
<ul style="list-style-type: none"> • January 10th: Working Group review of 2009 Forum recommendations and proposals for new recommendations. • January 17th: Forum discussion of report format and audience. 	<p>February 8th: Forum review and refinement of recommendations.</p>	<ul style="list-style-type: none"> • March 1st: Working Group review of a preliminary draft of the report. • March 8th: SGF review of draft 2 • March 11th: Intermediate, internal draft 3 reflecting and addressing comments from Forum members • March 28th: Draft 4 circulated to SGF • March 29th: Redacted draft 4 circulated to Corp. Partners Committee (confidential circulation) 	<ul style="list-style-type: none"> • April 5th: SGF review of draft 4

- Current draft 4 (dated March 25th) reflects the cumulative comments received from the Forum and Working Group to-date, including the March 8th meeting of the Forum.
- Approximately 40 pages of content (prior to formatting)
 - Some text in the current draft is intended for “outtake boxes” citing specific examples.
- Graphics (including smart homes roadmap illustration), formatting, etc. to follow.

EXECUTIVE SUMMARY (now includes recommendations)

SECTION 1: Realizing the Smart Grid

- PROGRESS OF FORUM
- PROGRESS OF GOVERNMENT AND AGENCIES
- PROGRESS OF UTILITIES AND BROADER COMMUNITY
- NORTH AMERICAN TRENDS
- MEASURING SMART GRID SUCCESS

SECTION 2: Next Steps and Challenges

- PRIVACY/SECURITY
- THIRD PARTY ACCESS
- ENGAGING THE CONSUMER
- EV INTEGRATION
- STORAGE INTEGRATION
- **STANDARDS** (combined with info. mgt. section)

SECTION 3: Smart Grid **Investments** & Benefits

- **ENHANCING THE GRID**
- **ENABLING DISTRIBUTED GENERATION**

CONCLUSIONS

APPENDIX 'A' (smart grid principles)

PRIVACY AND SECURITY

- *Recognizing that the 7 Privacy by Design principles developed by the Ontario Information and Privacy Commissioner provide valuable guidance with respect to compliance with applicable privacy laws and protecting consumers, these principles should be considered as best practice in the implementation of the smart grid in Ontario for both regulated and unregulated service providers.*
- *The Ontario Information and Privacy Commissioner should begin tracking smart-grid related consumer complaints with respect to how utilities and third parties use their information.*

THIRD PARTY ACCESS

- *Industry, in collaboration with the Forum and its Corporate Partners Committee, should work to resolve various technical and policy-related barriers to facilitating third-party access to electricity consumers and their real-time consumption information. Resolution must be consistent with the Smart Grid Principles now guiding the Ontario Energy Board, as directed by the Minister of Energy and Infrastructure.*



THIRD PARTY ACCESS (cont'd)

- *Industry, in collaboration with the Forum and its Corporate Partners Committee, should investigate the establishment of an Advanced Metering Infrastructure (AMI) test bed environment devoted to furthering interoperability between emerging products and services and various proprietary AMI systems deployed across the province as part of the Smart Metering Initiative.*



CONSUMER ENGAGEMENT

- *Industry and government should work toward meeting the development timelines established in the Smart Home Roadmap to bring greater control, choice, market participation and other benefits to electricity consumers. The Forum will facilitate timely development.*
- *Industry, in collaboration with the Forum, should examine the interactions between LDCs and third-party service providers in each area of the smart grid value chain, including support for electric vehicles, to remove barriers to competition.*



CONSUMER ENGAGEMENT (cont'd)

- *Industry, in collaboration with the Forum, should investigate and, where applicable, develop specific recommendations to help facilitate the role that aggregators can play in delivering additional benefits to consumers via the smart grid.*
- *Industry, in collaboration with the Forum, should identify gaps in knowledge specific to the development of the smart grid in Ontario and, where applicable, advocate research to fill those gaps.*
- *The Ontario Ministry of Energy should conduct an annual smart grid consumer engagement survey and share results with industry.*

EV INTEGRATION

- *The Ministry of Transportation should track the registration of electric vehicles and ensure that necessary information is provided to the electricity industry in a meaningful and timely manner. Where necessary, legislation and regulatory changes that facilitate this information exchange and protect consumer privacy should be made.*
- *Industry, in collaboration with the Forum, should investigate and recommend the appropriate parties and mechanisms to provide accurate and timely information to the electricity sector about the installation of Level 2 and higher charging stations.*

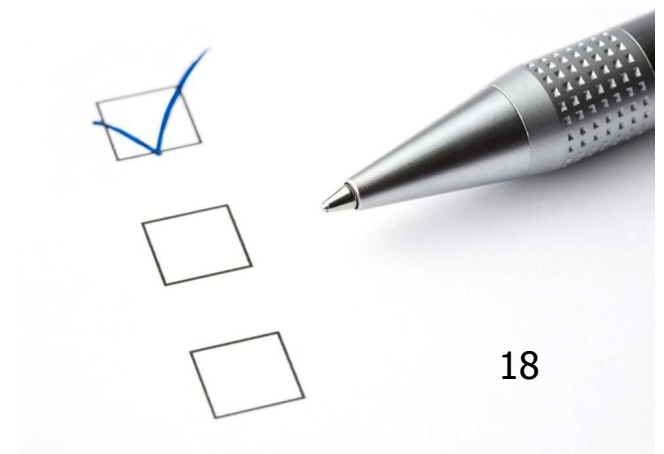
STORAGE INTEGRATION

- *The OPA and IESO, in consultation with industry and the OEB, should jointly develop a framework to promote the deployment of distributed energy storage where it could prove cost-effective.*

STANDARDS

- *Industry should rely upon widely used interoperability standards for defining smart grid specifications, paying particular attention to the upcoming national recommendations from the Canadian National Committee of the International Electrotechnical Commission and its Task Force on Smart Grid Technology and Standards (facilitated by the Standards Council of Canada).*

- Address comments from today's SGF meeting and any residual comments from Corporate Partners
- Incorporate Smart Homes roadmap illustration
- Format report, desktop publishing, etc.
- Prepare any required ancillary materials required for **roll-out plan...**



Discussion Item:

Roll-out plan proposal

- Position the report as a thoughtful and carefully researched view of the smart grid proposition in Ontario
- Demonstrate the broad spectrum of public and private sector participants in the report – and that this is a comprehensive view of smart grid evolution
- Underscore Ontario's leadership position in smart grid capabilities and the need for greater understanding about smart grids as a whole

Target: April 18th to 21st (TBC)

- Press release issued to Ontario and national/international smart grid/green energy media
- Report available in pdf:
 - Hard copies available in limited copies.
 - ePub available on iBookstore
 - 2D bar code
- Social media outreach
- IESO to co-ordinate media enquiries, directing interview requests to Forum/CPC members
- Related materials:
 - Backgrounder
 - Questions and Answers
 - Powerpoint template

- Draft press release/materials to be made available to Forum/CPC members for comment
- IESO will co-ordinate with Forum members and other communications contacts to alert them to the release and provide background info
- Advance webinar with LDCs to brief on report

Agenda Item # 4

Report back from the Corporate Partners Committee

{Continuing discussion from February 8th}

Agenda Item # 5:
SmartGrid Canada



Recall:

- The question of whether or not the Forum should join the membership of **SmartGrid Canada** discussed at its February 8th meeting.

- **Action item stemming from February 8th:**

“Forum members were asked to consider two questions regarding the Forum’s prospective involvement in SmartGrid Canada: i) do Forum members see value in this? and, ii) would our potential involvement dilute the Forum’s work here in Ontario?”

(as recorded in the February 8th minutes)

“SmartGrid Canada (SGC) is a new national organization dedicated to promoting a more modern and efficient electricity grid for the benefit of all Canadians. Our goal is to drive innovation and leadership to advance Canada’s Smart Grid infrastructure by engaging stakeholders from multiple industries.

We are comprised of public and private organizations, including utilities, vendors, technology and service providers, academia and other industry associations. A not-for-profit association, we work on behalf of our members to:

- Educate and build awareness of the need for and benefits of a modern, “smarter” electricity system – from energy providers through to consumers;
- Promote the research, development and deployment of new and innovative energy technologies and products;
- Advocate for national and provincial energy policies that support the development of Smart Grid technologies in Canada.

A Smart Grid will provide a more reliable and cost-effective supply of power, enable Canadians to better manage and conserve energy, and help build a stronger and more sustainable economy.”

{from the SmartGrid Canada website}

Classes of Membership:

1) Full Members

Eligibility: Canadian-based public and private businesses

2) Associate Members

Eligibility: Government agencies and other non-profit agencies


3) Affiliate Members

Eligibility: Education community, including colleges and universities

Cited Benefits of Membership from their website:

1. "Building relationships
2. Networking
3. Accessing key knowledge
4. Connecting globally
5. Impacting policy
6. Advancing the Smart Grid cause "



Option	Pros?	Cons?
<p>Option 1: Ontario Smart Grid Forum joins SmartGrid Canada as a single entity</p>	<ul style="list-style-type: none"> • Coordinated, unified representation of the Forum at a national level • One membership fee, shared by many 	<ul style="list-style-type: none"> • Potential dilution of Ontario's influence • Potential loss of independence of the Forum itself.
<p>Option 2: Ontario Smart Grid Forum doesn't join, but encourages its members to join individually</p>	<ul style="list-style-type: none"> • Stronger Ontario representation if a large number of SGF and CPC members join 	<ul style="list-style-type: none"> • Diminished ability to coordinate Ontario interests and act in a single, unified manner
<p>Option 3: Ontario Smart Grid Forum doesn't join, but liaises with SmartGrid Canada on an as-needed basis.</p>  <p>Recommended approach</p>	<ul style="list-style-type: none"> • Forum's independence maintained • No membership fee • Still an opportunity to draw together Ontario interests on a national stage. 	<ul style="list-style-type: none"> • Diminished opportunity to directly vote/influence policy and other decisions undertaken by SmartGrid Canada



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Power to Ontario.
On Demand.

Thank you.